

### **REMARKS**

The Office Action mailed February 17, 2006, has been received and the Examiner's comments carefully reviewed. Claims 50 and 54-69 are currently pending. Claim 70 has been withdrawn by the Examiner. Claims 64-69 are allowed. Favorable reconsideration of this application is requested in view of the following remarks.

#### ***Restriction/Election***

The Office Action states that claim 70 is directed to an invention that is independent or distinct from the invention originally claimed and that since Applicants have received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits, and, accordingly, claim 70 is withdrawn from consideration as being directed to a non-elected invention.

Applicants respectfully disagree with the reasoning stated above for withdrawing claim 70 from consideration and respectfully request rejoinder of claim 70 for examination on the merits. In the Restriction Response mailed on January 18, 2005, Applicants were requested to elect among patentably different *species* of the claimed invention and not among different *inventions*. Applicants, as a result, elected the species drawn to Figure 16A in the Response to the Restriction Requirement filed on April 18, 2005. Applicants respectfully submit that claim 70 reads on the elected species, the one drawn to Figure 16A. Claim 70 is a method claim essentially including the features of apparatus claim 50, and reads on the same species covered by claim 50. Applicants respectfully submit that it would not be unduly burdensome to perform a search covering both the claimed subject matter of claim 50 and claim 70 at the same time. For at least these reasons, Applicants respectfully request to leave claim 70 pending in the application for examination on the merits.

#### ***Claim Objections***

In the Office Action, claims 50 and 54-69 have been objected to because of the following informalities: it is unclear how the cap of the invention, which is plastic impregnated with an electrically conductive material, can be overall electrically non-conductive, since the conductive material is specifically added to make the structure electrically conductive. It is also stated in the Office Action that it is also unclear how the cap can reduce crosstalk if it is not grounded since the shielding used to reduce crosstalk (EMI) is normally grounded.

Applicants would like to clarify the above unclear issues. The cap in Applicants' invention is configured to be overall electrically non-conductive. The electrically conductive material is added to the non-conductive material of the cap to make the cap limit transmission of electrical signal away from its intended path and act as a shield to prevent crosstalk to and from the jack. There is electrically conductive material added to the cap to make it an effective crosstalk-reducing shield without making the cap itself overall electrically conductive. This configuration forms one important aspect of Applicants' invention. None of the prior art references shows such a configuration. All of the prior art designs includes an electrically conductive shield for reducing crosstalk between jacks, which in turn, has to be grounded.

As the Examiner has stated in the Office Action, shielding used to reduce crosstalk is *normally* grounded. Applicants, however, have invented a new configuration that is different than those shields normally used for cross-talk reduction in the prior art. Applicants have discovered that by impregnating non-conductive material with conductive material in such a way that the overall material still remains non-conductive, the crosstalk between jacks can still be effectively reduced by the presence of the conductive impregnants. And, the conductive impregnants, in turn, don't have to be grounded when the jack is terminated to a cable, which is a completely different configuration than the designs found in the prior art.

Thus, in view of the above, withdrawal of the above objection is respectfully requested.

### ***Claim Rejections - 35 USC § 103***

In the Office Action, claims 50, 54 and 63 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Lim 5685740 in view of Sangree et al 6807068. Applicants respectfully traverse this rejection.

Claim 50 recites, among other things, a cap manufactured of a material configured to minimize transmission of electrical signal away from its intended path, the cap constructed to fit about a jack, wherein the cap includes an electrically non-conductive material which is impregnated with an electrically conductive material such that the cap is overall electrically non-conductive, wherein the electrically conductive material of the cap is not constructed to be grounded when the jack is terminated to a cable.

Unlike the invention of claim 50, the termination cap (26, 28) in Lim is overall electrically conductive and is grounded when terminated to a cable. The sheet member 26 is fully metal. The stuffer member 28 defines electrically conductive parts (e.g., 28c, 28d, 28b-1,

and 28b-2) that are in electrical connection with the metal sheet member 26 to provide electrical continuity between the sheet member 26, the stuffer member 28, and a shielded cable. In this manner, the termination cap (26, 28) in Lim is grounded through the shield of the cable when terminated to the cable.

As discussed above, the cap featured in Applicants' invention of claim 50 is impregnated with electrically conductive material in such a way as to not make the overall cap electrically conductive, wherein the cap can still act as a crosstalk shield, without having to be grounded when the jack is terminated to a cable.

Regarding the Sangree reference, Sangree discloses an EMI shield that has embedded conductive materials that are configured to be grounded through a shielded cable. There is absolutely no disclosure in Sangree describing the EMI shield of Sangree as being overall non-conductive.

Regarding the combination of Sangree and the Lim references, firstly, there is simply no motivation or suggestion to replace the cap in Lim with the shield in Sangree. Lim discloses a fully metal sheet member 26 for the cap, which is likely to provide for better electrical conductivity than the carbon-embedded shield in Sangree. One skilled in the art would have had no motivation to replace the fully metal cap of Lim with the carbon-embedded shield of Sangree to ground a shielded cable.

Secondly, even if the configuration in Sangree were to be combined with the cap in Lim, the composition would not result in the same material composition as that of claim 50 and would not inherently function in the same manner. As discussed previously, in Applicants' invention of claim 50, there is electrically conductive material added to the cap in such a way as to make it an effective crosstalk-reducing shield without making the cap itself overall electrically conductive, which in turn does not have to be grounded. This configuration is not found in either of the above references. The shields of Lim and Sangree are conductive and are used to ground a shielded cable.

Thus, for at least the reasons stated above, independent claim 50 and dependent claims 54 and 63, which depend from and further modify claim 50, are patentable over Lim in view of Sangree et al and withdrawal of this rejection is respectfully requested.

In the Office Action, claims 55-58 and 60-62 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Lim in view of Sangree et al as applied to claims 50 and 54 above, and further in view of Arnett et al 6746283. Applicants respectfully traverse this rejection.

Claim 55 recites, among other things, a cap manufactured of a material configured to minimize transmission of electrical signal away from its intended path, the cap constructed to fit about the jack, wherein the cap includes an electrically non-conductive material which is impregnated with an electrically conductive material such that the cap is overall electrically non-conductive, wherein the electrically conductive material of the cap is not constructed to be grounded when the jack is terminated to a cable.

As discussed above with respect to claim 50, the termination cap (26, 28) in Lim is overall electrically conductive and is configured to be grounded when the jack is terminated to a cable. In sharp contrast, the cap featured in claim 55 is overall electrically non-conductive and is not constructed to be grounded when the jack is terminated to a cable.

Moreover, as discussed above, there is no motivation either in Lim or Sangree to replace the fully metal cap of Lim with the carbon-embedded shield of Sangree. And, even if the cap in Lim was modified according to Sangree, one would not arrive at Applicants' invention of claim 55, given that the shields in Lim and Sangree are used to ground a shielded cable.

Arnett et al fails to remedy the deficiencies of Lim in combination with Sangree et al. Specifically, Arnett also fails to disclose a cap including an electrically non-conductive material which is impregnated with an electrically conductive material such that the cap is overall electrically non-conductive, wherein the electrically conductive material of the cap is not constructed to be grounded when the jack is terminated to a cable.

For at least the reasons stated above, claim 55 is believed to be patentable over Lim in view of Sangree et al, and further in view of Arnett et al.

Claims 56-58 and 60-62 depend from and further modify claim 55 and are patentable for at least the same reasons specified with respect to claim 55.

Thus, in view of the above, withdrawal of the rejection of claims 55-58 and 60-62 over Lim in view of Sangree et al, and further in view of Arnett et al is respectfully requested.

In the Office Action, claim 59 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Lim in view of Sangree et al and Arnett et al as applied to claim 55 above, and further in view of Roselle et al 4820196. Applicants respectfully traverse this rejection.

Roselle et al fails to remedy the deficiencies of Lim in combination with Sangree et al and Arnett et al. Specifically, Roselle et al fails to disclose a cap including an electrically non-conductive material which is impregnated with an electrically conductive material such that the cap is overall electrically non-conductive, wherein the electrically conductive material of the cap is not constructed to be grounded when the jack is terminated to a cable. For at least this reason, claim 59 is believed to be patentable over Lim in view of Sangree et al and Arnett et al, and further in view of Roselle et al and withdrawal of this rejection is respectfully requested.

*Allowable Subject Matter*

In the Office Action, it is stated that claims 64-69 have been allowed. Applicants thank the Examiner for this notification.

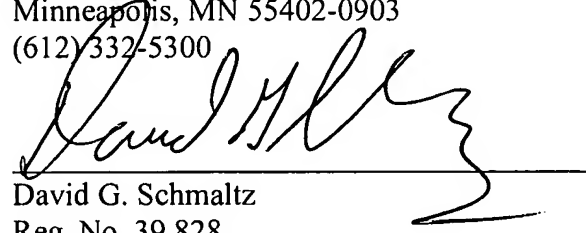
In view of the above remarks, Applicants respectfully request a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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Dated: \_\_\_\_\_

6/19/06

  
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